## Amendments to the Claims

13. (New) An audio signal recording disc encoded by a method which comprises the steps of:

implementing matrix operation among first multiple-channel digital audio signals to generate second multiple-channel audio signals correlating with each other, the first multiple-channel digital audio signals relating to a same sampling frequency;

subjecting the second multiple-channel signals to lossless encoding to convert the second multiple-channel signals into an encoding-resultant signal from which a decoding side can reproduce the second multiple-channel audio signals,

wherein the subjecting step comprises:

1) selecting a first sample among samples of each of the second multiple-channel audio signals for every prescribed interval of frame;

2) selecting one from each channel's different linear prediction methods and predictively encoding each of the second multiple-channel signals according to the selected one of each channel's different linear prediction methods, wherein the each channel's different linear prediction methods are of predicting each of the second multiple-channel audio signals from a past condition of each of the second multiple-channel audio signals to generate each channel's different prediction signals for each of the second multiple-channel audio signals, and generating each channel's prediction-error signals representing differences between each of the second multiple-channel audio signals and each channel's different prediction signals respectively, and wherein selected each channel's linear prediction method generates a smallest of each channel's prediction-error signals; and

3) generating a signal of a predetermined format having a header information area and a user data area, wherein the user data area includes an audio packet, and loading the header information with SCR information and loading the audio packet

Atty Docket: 0102/0234

with the selected first samples from said step 1) of selecting a first sample among samples of each of the second multiple-channel audio signals, the smallest each channel's prediction-error signal generated by the selected linear prediction method from said step 2), and an information piece representing the selected linear prediction methods from said step 2).

14. (New) A method of recording data to or reproducing data from the audio signal recording disc according to claim 13.

15. (New) A method of network-based communication, comprising the steps of:

transmitting and receiving a signal of a predetermined transmission packet format to and from a communication line, wherein the signal has been generated by an audio signal encoding method comprising:

implementing matrix operation among first multiple-channel digital audio signals to generate second multiple-channel audio signals correlating with each other, the first multiple-channel digital audio signals relating to a same sampling frequency;

subjecting the second multiple-channel signals to lossless encoding to convert the second multiple-channel signals into an encoding-resultant signal from which a decoding side can reproduce the second multiple-channel audio signals,

wherein the subjecting step comprises:

1) selecting a first sample among samples of each of the second multiple-channel audio signals for every prescribed interval of frame;

2) selecting one from each channel's different linear prediction methods and predictively encoding each of the second multiple-channel signals according to the selected one of each channel's different linear prediction methods, wherein the each channel's different linear prediction methods are of predicting each of the second multiple-channel audio signals from a past condition of each of the second

Atty Docket: 0102/0234

multiple-channel audio signals to generate each channel's different prediction signals for each of the second multiple-channel audio signals, and generating each channel's prediction-error signals representing differences between each of the second multiple-channel audio signals and each channel's different prediction signals respectively, and wherein selected each channel's linear prediction method generates a smallest of each channel's prediction-error signal; and

3) generating a signal of a predetermined format having a header information area and a user data area, wherein the user data area includes an audio packet, and loading the header information with SCR information and loading the audio packet with the selected first samples from said step 1) of selecting a first sample among samples of each of the second multiple-channel audio signals, the smallest each channel's prediction-error signals generated by the selected linear prediction method from said step 2), and an information piece representing the selected linear prediction methods from said step 2).

16. (New) A method of reproducing data which is provided via the network-based communication according to claim 15.